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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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OSTROLENK, FABER, GERB & SOFFEN, LLP (IBM)
1180 AVENUE OF THE AMERICAS
NEW YORK, NY 10036

EXAMINER

NGUYEN, VAN H

ART UNIT PAPER NUMBER

2194

DATE MAILED: 07/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/933,540

Applicant(s)

BARRITZ, ROBERT

Examiner

VAN H. NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,7 and 9-33 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1,7 and 9-33 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. In view of the Appeal Brief filed on 05/04/2006, PROSECUTION IS HEREBY REOPENED. A new ground of rejection s set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (a) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (b) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. Claims 1-7 and 9-33 are presented for examination.
3. It is noted that applicant has other related applications, now U.S Patent No. 5,499,340 filed on Jan. 12, 1994; U.S Patent No. 5,590,056 filed on Sep. 21, 1995; and U.S Patent No. 6, 996, 807 filed on Nov. 17, 2000. It is requested that any related application be referred to in the first sentence of the specification. Applicant is also requested to supply

the serial numbers of any other related applications currently pending before the U.S. Patent & Trademark Office.

Double Patenting

4. The nonstatutory double patenting; rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. CIT. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Uogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 C.F.R.' 1.321(b) would overcome an actual or provisional rejection on this ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 C.F.R.' 1.78(d).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-7 and 9-33 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-18 of U.S. Pat. No. 5, 499, 340.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed differences would be obvious to a programmer of ordinary skill.

For example, independent claim 1 of the instant application claims:

Claim 1. A system for determining program usage on a computer, the system comprising:

- a plurality of executable software programs constituting software products, each of the software products being constituted of one or more load modules, the load modules being stored in at least one memory of the computer;
- an operating system of the computer that controls execution in the computer of the software products through the invocation of respective load modules thereof;
- a monitor that is periodically triggered to collect load module execution information;
- a filtering facility that is effective to filter at least one previously identified program from the load module execution information;
- a correlator that correlates the filtered load module execution information with data that associates load module names with corresponding software products and develops a list of software products executed in the computer over the course of a given time period; and
- a reporter that outputs data reflecting the use of the software products in the computer in terms of software product names thereof.

In contrast, independent claim 1 of patent'340 claims:

Claim 1. Apparatus for determining program usage on a computer having a plurality of storage devices, said apparatus comprising:

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- first, second and third memory means;
- said first memory means storing a list of program module names of program modules and for each of said program module names storing a product name associated therewith;
- surveying means that surveys the storage devices and stores in said second memory means module names of modules stored on said storage devices;
- associating means that stores in said second memory means an association between the product names stored in said first memory means and each of said module names stored in said second memory means;
- monitoring means that monitors invocations of said modules on said computer system and stores in said third memory means invocation data relating to said invocations of said modules;
- correlating means that correlates said invocation data stored in said third memory means and said association between the product names and each of said module names stored in said second memory means; and
- reporting means that outputs the data correlated by said correlating means.

Because the instant claims merely alternatively claim limitations from the set of elements and functions claimed in patent'340, such modifications would be readily apparent to a programmer of ordinary skill.

Claims 1-7 and 9-33 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-112 of U.S. Pat. No. 5, 590, 056.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed differences would be obvious to a programmer of ordinary skill.

For example, independent claim 1 of the instant application claims:

Claim 1. A system for determining program usage on a computer, the system comprising:

- a plurality of executable software programs constituting software products, each of the software products being constituted of one or more load modules, the load modules being stored in at least one memory of the computer;
- an operating system of the computer that controls execution in the computer of the software products through the invocation of respective load modules thereof;
- a monitor that is periodically triggered to collect load module execution information;
- a filtering facility that is effective to filter at least one previously identified program from the load module execution information;
- a correlator that correlates the filtered load module execution information with data that associates load module names with corresponding software products and develops a list of software products executed in the computer over the course of a given time period; and
- a reporter that outputs data reflecting the use of the software products in the computer in terms of software product names thereof.

In contrast, independent claim 1 of patent'056 claims:

Claim 1. Apparatus for determining program usage on a computer having at least one storage device, said apparatus comprising:

- memory means having both a list of program module names of program modules and for each of said program module names a product name associated therewith stored therein;
- surveying means that surveys the storage devices and stores in said memory means module names of modules stored on said at least one storage device;
- associating means that stores in said memory means an association between the product names stored in said memory means and each of said module names stored in said memory means;
- monitoring means that monitors invocations of said modules on said computer and stores in said memory means invocation data relating to said invocations of said modules;
- correlating means that correlates said invocation data stored in said memory means and said association between the product names and each of said module names stored in said memory means; and
- reporting means that outputs the data correlated by said correlating means.

Because the instant claims merely alternatively claim limitations from the set of elements and functions claimed in patent'056, such modifications would be readily apparent to a programmer of ordinary skill.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-7, 9-25, and 28-33 rejected under 35 U.S.C. 102(e) as being anticipated by **Liu et al.** (the reference was cited in the previous Office Action) .

As to claim 22:

Liu teaches the invention substantially as claimed including a system for determining program usage on a computer (*e.g., monitoring application program usage in a computer system*) [see the Abstract and col.2, lines 37-48] the system comprising:

- a plurality of executable software programs (*e.g., application programs*) constituting software products, each of the software products being constituted of one or more load modules, the load modules being stored in at least one memory (*e.g., a memory*) of the computer [*see the discussions beginning at col.2, line 37 and col.4, line 1*];
- an operating system (*e.g., an operating system*) of the computer that controls execution (*e.g., controls execution*) in the computer of software products through the invocation of respective load modules thereof [*see the discussions beginning at col.2, line 37 and col.3, line 43*];
- a monitor (*e.g., program monitor 4*) that collects software product execution information by monitoring input or output to specific files or datasets by the software products [*see the program monitor discussion beginning at col.3, line 58*]; and
- a filtering facility that is effective to filter at least one previously identified program (*e.g., identifying a launched application program*) from the software product execution information, wherein such inputs and outputs are associated with corresponding software products or groups of software products [*see the discussion beginning at col.3, line 11; col.9, line 6*].

As to claim 23:

Liu teaches the monitor is implemented as a background process *[see the discussion beginning at col.4, line 37]*.

As to claim 24:

Liu teaches the monitor is implemented as an intercept systematically placed in either or both of a file open and/or file close system function of the computer *[see the discussion beginning at col.4, line 37]*.

As to claim 25:

Liu teaches the monitor is operated as a batch process *[see the discussion beginning at col.3, line 58]*.

As to claim 28:

The rejection of claim 22 above is incorporated herein in full. Additionally, Liu teaches:

- a library source determination facility (*e.g., local record file 5*) that determines the load library from which each executed load module has been loaded *[see the discussion beginning at col.4, line 10]*; and
- a reporter [*e.g., reports*] that outputs data showing the directory paths for load modules that have been executed *[see the discussion beginning at col.6, line 27]*.

As to claim 29:

Liu teaches the library source determination facility obtains a list of modules that have been used by a particular process, determines the load libraries and their search order used by the process, and using a search order determined in a prior step, searches the load libraries of the computer for a first library containing the same modules that best matches the list of modules used *[see the discussion beginning at col.4, line 10]*.

As to claim 30:

Liu teaches the monitor operates as a concurrent process and module usage data and load library collection data are both obtained by the monitor and library usage is concurrently determined *[see the discussion beginning at col.4, line 10]*.

As to claim 31:

Liu teaches the task of determining the correct load libraries in their appropriate search order is carried out as a separate process, wherein one of the module usage data or library collection data is obtained by the monitor and the other is obtained from a separate source and processed to determine load library usage *[see the discussion beginning at col.4, line 10]*.

As to claim 32:

Liu teaches the library source determination facility uses a JCL (Job Control Language) interpreter *[see the discussion beginning at col.4, line 10]*.

As to claim 33:

Liu teaches the load library determination facility determines both the identity and order of load libraries used by a particular process by reading JCL data structures of a current job to obtain a load library list for the process *[see the discussion beginning at col.4, line 10]*.

As to claim 1:

The rejections of claims 22 and 28 above are incorporated herein in full. Additionally, Liu teaches a correlator that correlates the load module execution information with data that associates load module names with corresponding software products and develops a list of software products executed in the computer over the course of a given time period *[see the discussion beginning at col.5, line 33]*.

As to claim 2:

Liu teaches the monitor operates by taking periodic snapshots of the then current state of active processes in the computer *[see the discussion beginning at col.3, line 11]*.

As to claim 3:

Liu teaches the load module execution information includes one or more of the following data items: module names, user names, the time when processes were started, how much

CPU time has been used, and a directory path name from which processes were installed
[see the discussion beginning at col.3, line 11].

As to claim 4:

Liu teaches a facility that allows adjusting the period between snapshots in response to
program usage activity levels *[see the discussion beginning at col.3, line 11].*

As to claim 5:

Liu teaches the monitor produces a list of executing load modules and their respective
directory path names *[see the discussion beginning at col.3, line 11].*

As to claim 6:

Liu teaches a facility that determines how many processes have begun and ended
between snapshots *[see the discussion beginning at col.3, line 11].*

As to claim 7:

Liu teaches a facility that compares successive snapshots to determine which modules
have executed and how many were missed *[see the discussion beginning at col.3, line
11].*

As to claim 8:

Liu teaches a filtering facility that is effective to filter known system programs from the load module execution information *[see the discussion beginning at col.3, line 11]*.

As to claim 9:

Liu teaches the load module execution information module names and other process related information including directory, start time, and process ID *[see the discussion beginning at col.4, line 60]*.

As to claim 10:

Liu teaches processes are identified by PID (Process IDs) numbers and the monitor includes a facility that obtains a measure of missed processes by calculating M minus H minus E , where M represents a current PID, H represents the highest PID found in a prior snapshot and E represents a count of all processes that have begun since the prior snapshot and are still executing *[see the discussion beginning at col.4, line 60]*.

As to claim 11:

Liu teaches the correlator operates in conjunction with a knowledge base that associates load module names with software product names *[see the discussion beginning at col.5, line 33]*.

As to claim 12:

Liu teaches a surveying program that develops an inventory of substantially all software products on the computer and a facility which produces a list of non-used software products based on comparing the inventory of software products against the data outputted by the reporter which reflects the use of the software products in the computer *[see the discussion beginning at col.5, line 33]*.

As to claim 13:

Liu teaches the knowledge base is a database of records which also associates file names to software products that use them and additionally includes at least one of the following: flags indicating if a module is used uniquely or shared among vendor products; a number indicating file matches required for correlation with the product; file type; file size; file creation date; and embedded strings of text *[see the discussion beginning at col.5, line 33]*.

As to claim 14:

Liu teaches the correlator operates by correlating module usage data with an inventory of software products that itself has been obtained by correlating in a knowledge base load module names with software product names *[see the discussion beginning at col.5, line 33]*.

As to claim 15:

Note the discussion of claim 1 above. Additionally, Liu teaches a monitor that collects load module execution information by deducing which load modules are being used in given processes of the computer, without directly monitoring the actual invocation by the operating system of the load modules *[see the program monitor discussion beginning at col.3, line 58]*.

As to claim 16:

Liu teaches the monitor obtains the load module execution information from a load module table created by the operating system which makes entries in the load module tables as processes are executed and access requests for load modules are made *[see the discussion beginning at col.4, line 1]*.

As to claim 17:

Liu teaches the monitor is implemented to execute every time the end of a process is reached *[see the discussion beginning at col.4, line 1]*.

As to claim 18:

Liu teaches the monitor executes as an exit routine near the end of a process *[see the discussion beginning at col.4, line 1]*.

As to claim 19:

Liu teaches the monitor gathers and accumulates usage data across sub processes of a higher level process so that when the load module table is successively read, only those module entries not previously encountered in a prior sub process of the current high level process are accumulated and names of load modules already found in the table for the current high level process are ignored *[see the discussion beginning at col.4, line 1]*.

As to claim 20:

Liu teaches the correlator operates by identifying the names of all software products used by correlating module usage data by using a knowledge base that associates the names of load modules with software products they comprise *[see the discussion beginning at col.5, line 33]*.

As to claim 21:

Liu teaches the correlator operates by correlating module usage data with an inventory of software products that itself has been obtained by correlating in a knowledge base load module names with software product names *[see the discussion beginning at col.5, line 33]*.

Indication of Allowable Subject Matter

6. Claims 26 and 27 appear to be allowable over the prior art of record, subject to the obviousness-type double patenting rejections detailed above, and subject to a final search.

Response to Arguments

7. Applicant's arguments filed on 05/04/2006 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. The prior art made of record, see PTO 892, and not relied upon is considered pertinent to applicant's disclosure. Applicant should review these references carefully before responding to this office action.

Contact Information

9. Any inquiry or a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: (571) 272-2100.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN H. NGUYEN whose telephone number is (571)

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272-3765. The examiner can normally be reached on Monday-Thursday from 8:30AM 6:00PM. The examiner can also be reached on alternative Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM THOMSON can be reached at (571) 272-3718.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

Commissioner for patents
P O Box 1450
Alexandria, VA 22313-1450

A handwritten signature in black ink, appearing to read "Van H. Nguyen", with a stylized flourish at the end.

Van H. Nguyen
Patent Examiner, AU 2194